

## **Budget (Attachment 6)**

### **Sunset Gap Seawater Intrusion Assessment**

The budget for the Sunset Gap Seawater Intrusion Assessment is based on the following:

- OCWD staff will manage the project, complete environmental compliance and permitting, preparation of the bidding documents, and related tasks.
- OCWD will hire a drilling contractor through a public works bidding process.
- OCWD is requesting \$250,000 in grant funding to assist with funding the costs associated with the drilling contractor (Task 6).
- OCWD's estimated labor charges are based on the raw labor rate of each OCWD employee times 1.35; this amount reflects OCWD's raw labor rate and the cost of employee benefits and overhead. OCWD is not requesting reimbursement of OCWD labor costs, but is showing the labor costs as part of the overall budget.

The budget is summarized in Table 1.

The non-state share will be funded through OCWD's Capital Improvement Program. OCWD has sufficient funds in the District's Capital Improvement Budget to fund this project. No federal funding is planned for this project.

The following tasks have been identified for the Sunset Gap Seawater Intrusion Assessment:

Task 1 – Project management

Task 2 – Reporting

Task 3 – Environmental compliance and permitting

Task 4 - Prepare plans, specifications, bid documents

Task 5 – Construction contracting (bidding, award to lowest responsible bidder)

Task 6 – Well construction

Task 7 – Well development and sampling

Task 8 – Preparation of Final Report

The costs associated with these tasks are described below.

**Table 1**  
**Budget for Sunset Gap Seawater Intrusion Assessment**

<b>Table 3 - Budget for Sunset Gap Seawater Intrusion Assessment</b>			
<b>Budget Category</b>	<b>Non-State Share (Funding Match)</b>	<b>Requested Grant Funding</b>	<b>Total</b>
Task 1 – Project management	\$21,000	\$0	\$21,000
Task 2 – Reporting	\$12,000	\$0	\$12,000
Task 3 – Environmental compliance and permitting	\$20,000	\$0	\$20,000
Task 4 - Prepare plans, specifications, bid documents	\$8,000	\$0	\$8,000
Task 5 – Construction contracting (bidding, award to lowest responsible bidder)	\$10,000	\$0	\$10,000
Task 6 – Well construction	\$597,470	\$250,000	\$847,470
Task 7 – Well development and sampling	\$117,500	\$0	\$117,500
Task 8 – Preparation of Final Report	\$9,000	\$0	\$9,000
<b>Total</b>	<b>\$794,970</b>	<b>\$250,000</b>	<b>\$1,044,970</b>

*Task 1 – Project Management*

This task entails managing the effort to conduct the scope of work, managing the budget and schedule, and the overall effort to successfully complete the project. The cost associated with this task is primarily for the labor hours of the Project Manager, and some labor support from administrative staff.

### *Task 2 – Reporting*

The cost associated with this task is primarily for the labor of the Project Manager and Project Field Geologist for preparation of reports. Some labor support from administrative staff is also included.

### *Task 3 – Environmental Compliance and Permitting*

The cost associated with this task is primarily the labor for the Project Field Geologist and Principal Planner. Some labor support from administrative staff is also included.

### *Task 4 - Prepare plans, specifications, bid documents*

The cost associated with this task is primarily the labor for the Project Field Geologist and OCWD's Contracts Administrator.

### *Task 5 – Construction contracting (bidding, award to lowest responsible bidder)*

The cost associated with this task is primarily the labor for the Project Field Geologist and OCWD's Contracts Administrator.

### *Task 6 – Well Construction*

The primary cost associated with this task is the cost for the drilling contractor. OCWD has estimated the cost of the drilling contractor's work under this task to be \$792,470. This estimate is based on the costs in the year 2011 drilling contract executed by OCWD for construction of two monitoring wells located in the Sunset Gap (BS10 and BS11). This approach provides a realistic estimate of the costs because it is based on recent competitive bidding for two wells of similar depth and materials that are located in the same area as the proposed wells for the Sunset Gap Seawater Intrusion Assessment.

Attachment 1 shows the cost estimate for the drilling contract (which includes costs for the drilling in Task 6 and well development in Task 7).

This task also includes OCWD labor costs for the Project Manager, Project Field Geologist, Technical Advisor, and an additional OCWD Field Geologist to oversee the well construction.

### *Task 7 – Well development and sampling*

This task includes well development and sampling the newly constructed wells.

OCWD has estimated the cost of the drilling contractor's work on this task to be \$87,500.

OCWD labor costs on this task include staff to oversee well development and OCWD staff time for well sampling and laboratory analysis.

*Task 8 – Preparation of Final Report*

The cost associated with this task is primarily for the labor of the Project Manager and Project Field Geologist for preparation of reports. Some labor support from administrative staff is also included.

**ATTACHMENT 1**  
**SUNSET GAP MONITORING WELL INSTALLATION DRILLING CONTRACT**  
**COST ESTIMATE**

SUNSET GAP MONITORING WELL INSTALLATION DRILLING CONTRACT COST ESTIMATE											
ITEM	DESCRIPTION	UNITS	UNIT PRICE (\$)	SITE #1		SITE #2		SITE #3		SITE #4	
				QTY	TOTAL (\$)	QTY	TOTAL (\$)	QTY	TOTAL (\$)	QTY	TOTAL (\$)
1	Mobilization to the project area and complete Site set-up, insurance, permits, bonds, financing, site security, project scheduling	L.S.	\$68,000	1	\$68,000	0	\$0	0	\$0	0	\$0
2	Move drill rig and all equipment between well sites, includes site set-up,	L.S.	\$38,000	0	\$0	1	\$38,000	1	\$38,000	1	\$38,000
3	Conduct geophysical utility clearance of the well location prior to drilling and installation of the conductor casing for the lump sum price of:	L.S.	\$3,500	1	\$3,500	1	\$3,500	1	\$3,500	1	\$3,500
4	Furnish, install, and maintain a minimum 20-foot tall soundproof enclosure with soundproof entry gate around the site for the lump sum price of:	L.S.	\$25,000	1	\$25,000	0	\$0	0	\$0	1	\$25,000
5	site clean up: Site clean up shall include site clean up and restoration, including, but not limited to re-grading dirt site disturbed by the work and installation of surface completion for the lump sum price of:	L.S.	\$7,500	1	\$7,500	1	\$7,500	1	\$7,500	1	\$7,500
6	Contain on-site and periodically dispose of cuttings, drilling and construction fluids, and development fluids from borehole for the lump sum price of:	L.S.	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
7	Rock Clause (drilling <5 ft/hr.) for the un	HR.	\$200	2	\$400	2	\$400	2	\$400	2	\$400
8	Stand-by time, as directed by the Geologist for the unit price of:	HR.	\$200	2	\$400	2	\$400	2	\$400	2	\$400
9	Furnish, install, and cement a minimum 24-inch diameter by 3/8-inch thick mild steel conductor casing in a minimum 30-inch diameter borehole from ground surface to a depth of approximately 50	L.F.	\$450	50	\$22,500	50	\$22,500	50	\$22,500	50	\$22,500
10	Drill a 17.5-inch diameter borehole by reverse circulation method from a depth of 50 feet for the unit price of:	L.F.	\$120	490	\$58,800	270	\$32,400	330	\$39,600	350	\$42,000
11	Conduct geophysical logging surveys including SP, single point, 16-inch normal, 64-inch normal, guard, and gamma ray for the lump sum price of:	L.S.	\$4,500	1	\$4,500	1	\$4,500	1	\$4,500	1	\$4,500
12	Conduct deviation and directional survey with magnetometer for the lump sum price of:	L.S.	\$2,500	1	\$2,500	1	\$2,500	1	\$2,500	1	\$2,500
13	Furnish and install gravel/bentonite bottom seal following geophysical logging for the unit price of:	L.F.	\$50	30	\$1,500	30	\$1,500	30	\$1,500	30	\$1,500
14	Conduct caliper log survey for the lump sum price of:	L.S.	\$1,750	1	\$1,750	1	\$1,750	1	\$1,750	1	\$1,750

SUNSET GAP MONITORING WELL INSTALLATION  
DRILLING CONTRACT COST ESTIMATE

ITEM	DESCRIPTION	UNITS	UNIT PRICE (\$)	SITE #1		SITE #2		SITE #3		SITE #4	
				QTY	TOTAL (\$)	QTY	TOTAL (\$)	QTY	TOTAL (\$)	QTY	TOTAL (\$)
15	Furnish and install nominal 2-inch diameter, flush-threaded, schedule 80 ASTM F-480 PVC blank well casing with O-rings, as specified, for the unit price of:	L.F.	\$7	1075	\$7,525	595	\$4,165	800	\$5,600	840	\$5,880
16	Furnish and install 2-inch diameter, flush-threaded, schedule 80 ASTM F-480 PVC slotted well screen with O-rings, as specified, for the unit price of:	L.F.	\$10	85	\$850	90	\$900	80	\$800	70	\$700
17	Furnish and install 8 X 16 gradation gravel pack in annular space between annular seals for the unit price of:	L.F.	\$35	150	\$5,250	130	\$4,550	135	\$4,725	130	\$4,550
18	Furnish and install gravel/ bentonite annular seals in annular space between gravel envelopes for the unit price of:	L.F.	\$45	320	\$14,400	100	\$4,500	155	\$6,975	180	\$8,100
19	Furnish and install cement grout seal in the annular space from top of annular seal to 5 feet below ground surface for the unit price of:	L.F.	\$75	40	\$3,000	60	\$4,500	60	\$4,500	60	\$4,500
20	Conduct well development by mechanical procedures including swabbing, airlifting, bailing and pumping for the unit price of:	HR.	\$350	70	\$24,500	60	\$21,000	60	\$21,000	60	\$21,000
21	Conduct video camera survey of each well casing for the lump sum price of:	L.S.	\$1,750	1	\$1,750	1	\$1,750	1	\$1,750	1	\$1,750
22	Demobilize from the project area for the lump sum price of:	L.S.	\$6,500	0	\$0	0	\$0	0	\$0	1	\$6,500
23	Miscellaneous equipment and/or services not covered above at invoiced cost plus 15%	Each		0	\$0	0	\$0	0	\$0	0	\$0

COST PER WELL SITE:    \$278,625                    \$181,315                    \$192,500                    \$227,530

TOTAL PROJECT COST:    \$879,970